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Attorney Docket No. 8998

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Application of:

Joanne Walter

Art Unit: 3629

Serial No.: 09/478,777

Examiner: I. Borissov

Filed: January 6, 2000

For: **APPARATUS AND METHOD FOR OPERATING A SELF-SERVICE  
CHECKOUT TERMINAL HAVING A VOICE GENERATING DEVICE  
ASSOCIATED THEREWITH**

**APPEAL BRIEF**

Sir:

Appellant has filed a timely Notice of Appeal from the action of the Office, dated July 19, 2006, finally rejecting all of the claims in the present application.

**(i) REAL PARTY IN INTEREST**

The real party in interest is NCR Corporation.

**(ii) RELATED APPEALS AND INTERFERENCES**

There are no related appeals and interferences.

**(iii) STATUS OF THE CLAIMS**

Claims 1, 3-9, 11-17, 19, 20, and 27-37 are pending in the application.

Claims 1, 3-9, 11-17, 19, 20, and 27-34 stand rejected under 35 USC 103(a) as being unpatentable over Schneider (5,083,638) in view of Sato (5,949,854) and further in view of Masson (4,908,850) and further in view of Humble (4,676,343).

Claims 36-37 stand rejected under 35 USC 103(a) as being unpatentable over Schneider (5,083,638) in view of Sato (5,949,854) and further in view of Masson (4,908,850) and further in view of Humble (4,676,343) and further in view of Official Notice.

Claims 1, 3-9, 11-17, 19, 20, and 27-37 are appealed.

There are no other claims, e.g., allowed, withdrawn, or objected to in the application.

**(iv) STATUS OF AMENDMENTS**

Appellant did not file a Response subsequent to the Final Rejection.

**(v) SUMMARY OF CLAIMED SUBJECT MATTER**

Claims 1, 3-9, 11-17, 19, 20, and 27-37 relate to a method of managing product returns.

As embodied in claims 1 and 3-8, the invention includes a method of operating a retail terminal.

With respect to independent claim 1, the invention includes:

generating a first voice instruction in a first voice type which instructs a user in regard to operation of said retail terminal by the retail terminal; (page 17, lines 1-13)

determining if said user performs a first activity with said retail terminal which is indicative of said user responding to said first voice instruction and generating a

proper-response control signal in response thereto by the retail terminal; (page 19-20, lines 15-23 and 1-21)

generating a second voice instruction in a second voice type different from the first voice type which instructs said user in regard to operation of said retail terminal if a predetermined amount of time lapses subsequent to generation of said first voice instruction, but prior to generation of said proper-response control signal by the retail terminal; (Page 21, lines 10-22)

determining if said user performs a second activity with said retail terminal which is indicative of said user disregarding said first voice instruction and generating an improper-response control signal in response thereto by the retail terminal; and (page 22, lines 18-22)

activating a light for summoning help following generation of said improper-response control signal by the retail terminal (page 22, lines 22-23).

With respect to dependent claim 3, the invention further includes:

updating an electronic log value in response to generation of said improper-response control signal by the retail terminal; (page 24, lines 15-17) and

comparing said electronic log value to a log threshold and generating a personnel-needed control signal if said electronic log value has a predetermined relationship with said log threshold by the retail terminal. (page 24, lines 18-23)

With respect to dependent claim 4, the invention further includes:

wherein said step of generating said first voice instruction in said first voice type includes the step of

generating said first voice instruction at a first volume level by the retail terminal, (page 18, lines 11-13)

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second volume level by the retail terminal, and (page 20, lines 20-21)

said second volume level is greater than said first volume level. (page 20, lines 20-21)

With respect to dependent claim 5, the invention further includes:

wherein said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice inflection level by the retail terminal, (page 18, lines 13-15)

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice inflection level by the retail terminal, and (Page 21-22, lines 22 and 1-2)

said first voice inflection level is different than said second voice inflection level. (Page 21-22, lines 22 and 1-2)

With respect to dependent claim 6, the invention further includes:

wherein said first voice type is configured by the retail terminal to resemble a human female voice, and (Page 18-19, lines 21-23 and 1-2; original claim 6)

said second voice type is configured by the retail terminal to resemble a human male voice. (page 18, lines 21-23 and page 22, lines 3-6; original claim 6)

With respect to dependent claim 7, the invention further includes:

wherein said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice pitch level by the retail terminal, (Page 18, lines 15-16; original claim 7)

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice pitch level by the retail terminal, and (page 18, lines 21-23 and page 22, lines 3-6; original claim 7)

said first voice pitch level is different than said second voice pitch level. (page 18, lines 21-23 and page 22, lines 3-6; original claim 7)

With respect to dependent claim 8, the invention further includes:

wherein said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice tone level by the retail terminal, (page 18, lines 15-16; original claim 8)

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice tone level by the retail terminal, and (page 18, lines 21-23 and page 22, lines 3-6; original claim 8)

said first voice tone level is different than said second voice tone level. (page 18, lines 21-23 and page 22, lines 3-6; original claim 8)

As embodied in claims 9 and 11-16, the invention includes a retail terminal.

With respect to independent claim 9, the invention includes

a light; (page 9, lines 3-9: Fig. 1, ref numeral 11)

a voice generating device; (page 10, lines 2-3)

a processing unit electrically coupled to said voice generating device and said light; and (page 6, line 20; page 10, lines 2-3)

a memory device electrically coupled to said processing unit, wherein said memory device has stored therein a plurality of instructions which, when executed by said processing unit, causes said processing unit to: (page 7, line 2)

(a) operate said voice generating device so as to generate a first voice instruction in a first voice type which instructs a user in regard to operation of said retail terminal, (page 17, lines 1-13)

(b) determine if said user performs a first activity with said retail terminal which is indicative of said user responding to said first voice instruction and generate a proper-response control signal in response thereto, (page 19-20, lines 15-23 and 1-21)

(c) operate said voice generating device so as to generate a second voice instruction in a second voice type different from the first voice type which instructs said user in regard to operation of said retail terminal if a predetermined amount of time lapses subsequent to generation of said first voice instruction, but prior to generation of said proper-response control signal, (Page 21, lines 10-22)

(d) determine if said user performs a second activity with said retail terminal which is indicative of said user

disregarding said first voice instruction and generate an improper-response control signal in response thereto, and (page 22, lines 18-22)

(e) activate the light for summoning help following said improper-response control signal. (page 22, lines 22-23)

With respect to dependent claim 11, the invention further includes

wherein said plurality of instructions, when executed by said processing unit, further causes said processing unit to:

(a) update an electronic log value in response to generation of said improper-response control signal, and (page 24, lines 15-17)

(b) compare said electronic log value to a log threshold and generate a personnel-needed control signal if said electronic log value has a predetermined relationship with said log threshold. (page 24, lines 18-23)

With respect to dependent claim 12, the invention further includes

wherein said plurality of instructions, when executed by said processing unit, further causes said processing unit to:

(a) operate said voice generating device so as to generate said first voice instruction at a first volume level, and (page 18, lines 11-13)

(b) operate said voice generating device so as to generate said second voice instruction at a second volume level, wherein said second volume level is greater than said first volume level. (page 20, lines 20-21)

With respect to dependent claim 13, the invention further includes

wherein said plurality of instructions, when executed by said processing unit, further causes said processing unit to:

(a) operate said voice generating device so as to generate said first voice instruction at a first voice inflection level, and (page 18, lines 13-15)

(b) operate said voice generating device so as to generate said second voice instruction at a second voice inflection level, wherein said first voice inflection level is different than said second voice inflection level. (Page 21-22, lines 22 and 1-2)

With respect to dependent claim 14, the invention further includes

wherein said first voice type is configured to resemble a human female voice, and (Page 18-19, lines 21-23 and 1-2; original claim 14)

said second voice type is configured to resemble a human male voice. (page 18, lines 21-23 and page 22, lines 3-6; original claim 14)

With respect to dependent claim 15, the invention further includes

wherein said plurality of instructions, when executed by said processing unit, further causes said processing unit to:

(a) operate said voice generating device so as to generate said first voice instruction at a first voice pitch level, and (Page 18, lines 15-16; original claim 15)

(b) operate said voice instruction device so as to generate said second voice instruction at a second voice



pitch level, wherein said first voice pitch level is different than said second voice pitch level. (page 18, lines 21-23 and page 22, lines 3-6; original claim 15)

With respect to dependent claim 16, the invention further includes

wherein said plurality of instructions, when executed by said processing unit, further causes said processing unit to:

(a) operate said voice generating device so as to generate said first voice instruction at a first voice tone level, and (page 18, lines 15-16; original claim 16)

(b) operate said voice generating device so as to generate said second voice instruction at a second voice tone level, wherein said first voice tone level is different than said second voice tone level. (page 18, lines 21-23 and page 22, lines 3-6; original claim 16)

As embodied in claims 17, 19, and 20, the invention includes a method of operating a retail terminal.

With respect to independent claim 17, the invention includes:

generating a first voice instruction at a first voice inflection level so as to instruct a user in regard to operation of said retail terminal by the retail terminal; (page 17, lines 1-13)

determining if said user performs a first activity with said retail terminal which is indicative of said user responding to said first voice instruction and generating a proper-response control signal in response thereto by the retail terminal; (page 19-20, lines 15-23 and 1-21)

generating a second voice instruction at a second voice inflection level different from the first voice inflection level so as to instruct said user in regard to operation of said retail terminal if a predetermined amount of time lapses subsequent to generation of said first voice instruction, but prior to generation of said proper-response control signal, wherein said first voice inflection level is different than said second voice inflection level by the retail terminal; (Page 21, lines 10-22)

determining if said user performs a second activity with said retail terminal which is indicative of said user disregarding said second voice instruction and generating an improper-response control signal in response thereto by the retail terminal; (page 22, lines 18-22)

generating a third voice instruction at a third inflection level which instructs said user in regard to operation of said retail terminal in response to generation of said improper-response control signal by the retail terminal; (page 22, lines 18-23)

determining if said user performs a third activity with said retail terminal which is indicative of said user disregarding said third voice instruction and generating another improper-response control signal in response thereto by the retail terminal; and (page 22, lines 18-23)

activating a light for summoning help following generation of said other improper-response control signal by the retail terminal. (page 22, lines 22-23)

With respect to dependent claim 19, the invention further includes:

updating an electronic log value in response to generation of said improper-response control signal by the retail terminal; and (page 24, lines 15-17)

comparing said electronic log value to a log threshold and generating a personnel-needed control signal if said electronic log value has a predetermined relationship with said log threshold by the retail terminal. (page 24, lines 18-23)

With respect to dependent claim 20, the invention further includes:

wherein said step of generating said first voice instruction at said first voice inflection level includes the step of generating said first voice instruction at a first volume level by the retail terminal, (page 18, lines 11-13)

said step of generating said second voice instruction at said second voice inflection level includes the step of generating said second voice instruction at a second volume level by the retail terminal, and (page 20, lines 20-21)

said second volume level is greater than said first volume level. (page 20, lines 20-21)

As embodied in claims 27-34, the invention includes a method for a self-service terminal.

With respect to independent claim 27, the invention includes:

generating a first voice instruction in a first voice type which instructs a self-service user in regard to operation of said self-service retail terminal by the retail terminal; (page 17, lines 1-13)

determining if said self-service user performs a first activity with said retail terminal which is indicative of said self-service user responding to said first voice instruction and generating a proper-response control signal

in response thereto by the retail terminal; (page 19-20, lines 15-23 and 1-21)

if a predetermined amount of time lapses subsequent to generation of said first voice instruction, but prior to generation of said proper-response control signal, generating a second voice instruction in a second voice type different from the first voice type in order to convey a desired impression on the self-service user that the self-service user has improperly used the self-service terminal, and to instruct said self-service user in regard to the proper operation of said self-service retail terminal by the retail terminal; (Page 21, lines 10-22)

determining if said user performs a second activity with said retail terminal which is indicative of said user disregarding said second voice instruction and generating another improper-response control signal in response thereto by the retail terminal; and (page 22, lines 18-22)

activating a light for summoning help following generation of said other improper-response control signal by the retail terminal. (page 22, lines 22-23)

With respect to dependent claim 28, the invention further includes:

generating a third voice instruction in a third voice type different than the first and second voice types in order to convey another desired impression on the self-service user that the self-service user has improperly used the self-service terminal, and to instruct said self-service user in regard to the proper operation of said self-service retail terminal in response to generation of said improper-response control signal by the retail terminal; (page 22, lines 18-23)

determining if said user performs a third activity with said retail terminal which is indicative of said user disregarding said third voice instruction and generating another improper-response control signal in response thereto by the retail terminal; and (page 22, lines 18-23)

activating a light for summoning help following generation of said other improper-response control signal by the retail terminal. (page 22, lines 22-23)

With respect to dependent claim 29, the invention further includes:

updating an electronic log value in response to generation of said improper-response control signal by the retail terminal; and (page 24, lines 15-17)

comparing said electronic log value to a log threshold and generating a personnel-needed control signal if said electronic log value has a predetermined relationship with said log threshold by the retail terminal. (page 24, lines 18-23)

With respect to dependent claim 30, the invention further includes:

wherein said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first volume level by the retail terminal, (page 18, lines 11-13)

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second volume level by the retail terminal, and (page 20, lines 20-21)

said second volume level is greater than said first volume level. (page 20, lines 20-21)

With respect to dependent claim 31, the invention further includes:

wherein said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice inflection level by the retail terminal, (page 18, lines 13-15)

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice inflection level by the retail terminal, and (Page 21-22, lines 22 and 1-2)

said first voice inflection level is different than said second voice inflection level. (Page 21-22, lines 22 and 1-2)

With respect to dependent claim 32, the invention further includes:

wherein said first voice type is configured by the retail terminal to resemble a human female voice, and (Page 18-19, lines 21-23 and 1-2; original claim 6)

said second voice type is configured by the retail terminal to resemble a human male voice. (page 18, lines 21-23 and page 22, lines 3-6; original claim 6)

With respect to dependent claim 33, the invention further includes:

wherein said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice pitch level by the retail terminal, (Page 18, lines 15-16; original claim 7)

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice pitch level by the retail terminal, and (page 18, lines 21-23 and page 22, lines 3-6; original claim 7)

said first voice pitch level is different than said second voice pitch level. (page 18, lines 21-23 and page 22, lines 3-6; original claim 7)

With respect to dependent claim 34, the invention further includes:

wherein said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice tone level by the retail terminal, (page 18, lines 15-16; original claim 8)

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice tone level by the retail terminal, and (page 18, lines 21-23 and page 22, lines 3-6; original claim 8)

said first voice tone level is different than said second voice tone level. (page 18, lines 21-23 and page 22, lines 3-6; original claim 8)

As embodied in claims 35-37, the invention includes a method for a self-service terminal.

With respect to independent claim 35, the invention includes:

generating a first voice instruction in a first voice type instructing a self-service customer to perform a task

during a transaction by said retail terminal; (page 17, lines 1-13)

determining if said self-service customer performs the task by said retail terminal; (page 19-20, lines 15-23 and 1-21)

if said self-service customer fails to perform the task, generating a second voice instruction in a second voice type by said retail terminal, wherein the second voice type is different than the first voice type and conveys an impression of seriousness to the self-service customer; (Page 21, lines 10-22)

determining if said user performs the task following the second voice instruction by the retail terminal; and (page 22, lines 18-22)

if said self-service customer fails to perform the task, activating a light for summoning help by the retail terminal. (page 22, lines 22-23)

With respect to independent claim 36, the invention includes:

generating a first voice instruction in a first voice type instructing a self-service customer to perform a task during a transaction by said retail terminal; (page 17, lines 1-13)

determining if said self-service customer performs the task by said retail terminal; and (page 19-20, lines 15-23 and 1-21)

if said self-service customer fails to perform the task before a predetermined amount of time lapses subsequent to generation of said first voice instruction, generating a second voice instruction in a second voice type by said retail terminal, wherein the second voice type is different than the first voice type and conveys an impression of



seriousness to the self-service customer; (Page 21, lines 10-22)

determining if said user performs the task following the second voice instruction by the retail terminal; and (page 22, lines 18-22)

if said self-service customer fails to perform the task before the predetermined amount of time lapses subsequent to generation of said second voice instruction, activating a light for summoning help by the retail terminal. (page 22, lines 22-23)

With respect to independent claim 37, the invention includes:

generating a first voice instruction in a first voice type instructing a self-service customer to perform a first task during a transaction by said retail terminal; (page 17, lines 1-13)

determining if said self-service customer performs a second task different than the first task which is indicative of said self-service customer disregarding the first voice instruction by said retail terminal; and (page 19-20, lines 15-23 and 1-21)

if said self-service customer performs the second task, generating a second voice instruction in a second voice type by said retail terminal, wherein the second voice type is different than the first voice type and conveys an impression to the self-service customer that the self-service customer is illicitly operating the terminal; (Page 21, lines 10-22)

determining if said user performs the first task following the second voice instruction by the retail terminal; and (page 22, lines 18-22)

if said self-service customer fails to perform the first task, activating a light for summoning help by the retail terminal. (page 22, lines 22-23)

**(vi) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Whether claims 1, 3-9, 11-17, 19, 20, and 27-34 are unpatentable under 35 USC 103(a) over Schneider (5,083,638) in view of Sato (5,949,854) and further in view of Masson (4,908,850) and further in view of Humble (4,676,343).

Whether claims 36-37 are unpatentable under 35 USC 103(a) over Schneider (5,083,638) in view of Sato (5,949,854) and further in view of Masson (4,908,850) and further in view of Humble (4,676,343) and further in view of Official Notice.

**(vii) ARGUMENT**

Schneider (5,083,638) discloses a checkout terminal capable of producing audio prompts. Schneider discloses repeating of audio prompts.

Sato (5,949,854) discloses a voice response service apparatus for providing voice instructions during a telephone service that are adapted to the characteristics of a user, e.g., based upon the user's sex or age. A database 23 stores the user characteristics. Upon user identification, e.g., following entry by the user of a phone number, service execution unit 17 retrieves the characteristics and adapts the voice instructions.

Masson (4,908,850) discloses a voice services network which uses a telephone message delivery system to accomplish

electronic billing. Masson further discloses that the telephone message delivery system includes an interactive voice exchange computer which plays messages. If a telephone user fails to respond to a voice prompt from the computer for an account number within a predetermined time period, the computer repeats the prompt.

Humble (4,676,343) discloses a checkout terminal having a display screen for displaying instructions to a user. The user obtain help by touching the screen to activate a signal lamp for alerting an appropriate assistant.

The Office has cited as Official Notice that it is old and well known to change voice quality to convey an impression of seriousness.

To establish a *prima facie* case of obviousness, the Office has the burden of factually supporting at least the following three criteria (MPEP Section 2142):

- (1) the prior art reference (or references when combined) must teach or suggest all the claim limitations;
- (2) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; and
- (3) there must be a reasonable expectation of success found in the references.

**THE REJECTION OF CLAIM 1, 3-9, 11-17, 19, 20, and 27-37  
UNDER 35 U.S.C. §103(a) IS IMPROPER BECAUSE THE REFERENCES  
FAIL TO TEACH EACH AND EVERY ELEMENT OF APPELLANT'S CLAIMS.**

With respect to independent claim 1, for example, the Office has failed to produce references which teach

...

generating a second voice instruction in a second voice type different from the first voice type which instructs said user in regard to operation of said retail terminal if a predetermined amount of time lapses subsequent to generation of said first voice instruction, but prior to generation of said proper-response control signal by the retail terminal;

determining if said user performs a second activity with said retail terminal which is indicative of said user disregarding said first voice instruction and generating an improper-response control signal in response thereto by the retail terminal; and

activating a light for summoning help following generation of said improper-response control signal by the retail terminal.

None of the references teach generating a second voice type by a retail terminal following a determination by the retail terminal that a user has disregarded a first voice instruction in a first voice type. Schneider is the only cited reference that discloses a retail terminal that generates voice prompts.

Sato and Masson relate to telephone services. Sato discloses adjusting voice types based upon stored user characteristics, not based upon a failure of a user to respond properly.

Masson repeats a prompt for an account number after a predetermined time period to determine when a telephone call should be terminated for lack of a response, while still giving the user a chance to enter the account number, not to determine when to call for assistance, while still giving the user a chance to complete a proper action.

Humble discloses a light, but it is activated by users. The Office conceded that the signal lamp of Humble is not activated by the retail terminal.

The Office suggested that it would be obvious to modify Humble to have the retail terminal activate the light in response to an improper-response control signal, stating that replacing manual activity which has accomplished the same result involves only routine skill in the art. However, the Office has oversimplified Appellant's claims. There is no teaching in Humble or offered by the Office, that supports the retail terminal receiving an improper-response control signal and activating the light in response thereto, including how such a modification would be accomplished.

With respect to claims 36 and 37, the Office has further cited Official Notice that it is well known to use or change voice quality to convey an impression of seriousness. There is no teaching offered by the Office or the references, that supports generation of a second voice instruction by a retail terminal in a second voice type by said retail terminal, wherein the second voice type is different than the first voice type and conveys an impression to the self-service customer that the self-service customer is illicitly operating the terminal.

**THE REJECTION OF CLAIMS 1, 3-9, 11-17, 19, 20, and 27-37  
UNDER 35 U.S.C. §103(a) IS IMPROPER BECAUSE THE OFFICE HAS  
FAILED TO PROVIDE A PROPER SUGGESTION OR MOTIVATION TO  
COMBINE THE REFERENCES.**

In the July 19, 2006 final action, the Office conceded that Schneider (US 5,083,638) does not teach that the voice instructions are of different types, that subsequent voice instructions are generated after a predetermined time lapse, or that a light is used to summon help, as recited in the independent claims.

The Office relies on the teachings of Sato (US 5,949,854) to satisfy the elements relating to different voice types.

There is no teaching or suggestion in either reference to combine the teachings of Sato with those of Schneider to vary a voice type following an improper action of a user at a retail terminal.

The Office stated that the motivation comes from the attractiveness of the system to users that would result from conforming voice type to the age and sex of the user. While Sato may have tried to solve the problem of adapting a voice type to a user to make Sato's telephone service easier or more attractive to the user, Appellant's were trying to solve a different problem of assisting a user who is not following voice instructions at a retail terminal. Appellant's reason for changing voice type is directed to alerting a user to perform a proper action following an improper action, not to making the checkout terminal more attractive to a user. Therefore, the motivation provided by

the Office, based upon the proposed advantage of attractiveness, fails because the problem being solved by Sato is different, or the motivation based upon the proposed advantage is at least improper hindsight.

The Office relies on the teachings of Masson (US 4,908,850) to satisfy the elements relating to prompting a user following a predetermined time period.

There is no teaching or suggestion in the references to combine the teachings of Masson with those of Sato and Schneider to time a time period following a first voice instruction related to an improper user action and to issue a second voice instruction different from the first voice instruction following expiration of the time period, but before generation of a proper-response control signal.

The Office stated that the motivation comes from the helpfulness of the system to inexperienced users. However, Masson repeats a prompt for an account number after a predetermined time period to determine when a telephone call should be terminated for lack of a response while still giving the user a chance to enter the account number. The problem Appellant's was trying to solve was to determine when to call for assistance while still giving the user a chance to complete a proper action. Therefore, the motivation provided by the Office, based upon the proposed advantage of helpfulness, fails because the problem being solved by Masson is different, or the motivation based upon the proposed advantage is at least improper hindsight.

The Office relies on the teachings of Humble (US 4,676,343) and Official Notice to satisfy the elements

relating to activating a light by the retail terminal in response to an improper-response control signal.

There is no teaching or suggestion in the references to combine the teachings of Humble with those of Masson, Sato, and Schneider to activate a light for summoning help following generation of an improper-response or personnel-needed control signal by the retail terminal.

In Humble, users determine whether they need help and choose to activate the lamp or not through the touch screen. The problem solved by Humble is to provide users who think they need help with a means for obtaining help. In Appellant's invention, the user has no choice. The problem being solved is when to call for assistance. The reason for activating the light in this way is to not just provide assistance to users who are confused, but to minimize theft by users.

The Office conceded that the signal lamp of Humble is not activated by the retail terminal. The Office suggested that it would be obvious to modify Humble to have the retail terminal activate the light in response to an improper-response control signal, stating that replacing manual activity which has accomplished the same result involves only routing skill in the art. However, the Office has oversimplified Appellant's claims. There is no teaching in Humble or offered by the Office, that supports the retail terminal receiving an improper-response control signal and activating the light in response thereto, including how such a modification would be accomplished.



**THE REJECTION OF CLAIMS 1, 3-9, 11-17, 19, 20, and 27-37  
UNDER 35 U.S.C. §103(a) IS IMPROPER BECAUSE THE OFFICE HAS  
FAILED TO PROVIDE A REASONABLE EXPECTATION OF SUCCESS.**

"The expectation of success must be founded in the prior art, not in the applicant's disclosure." *In re Dow Chemical Co.* 837 F.2d 469 5 S.P.Q.2D (BNA) 1529 (Fed. Cir. 1988). The Office has failed to provide a citation from within the references that provide a reasonable expectation of success for the combination of the references.

The references do not show or suggest  
generating a second voice instruction in a second voice type different from the first voice type which instructs said user in regard to operation of said retail terminal if a predetermined amount of time lapses subsequent to generation of said first voice instruction, but prior to generation of said proper-response control signal by the retail terminal;

determining if said user performs a second activity with said retail terminal which is indicative of said user disregarding said first voice instruction and generating an improper-response control signal in response thereto by the retail terminal; and

activating a light for summoning help following generation of said improper-response control signal by the retail terminal.

There is no teaching in Humble or offered by the Office, that supports the retail terminal receiving an improper-response control signal and activating the light in response thereto, including how such a modification would be accomplished.

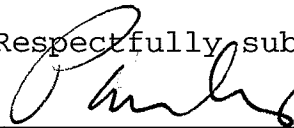
Further, since Sato and Masson relate to telephone services, there is no teaching or suggestion how to implement the techniques of Sato and Masson in a retail terminal. Therefore, there can be no reasonable expectation of success of combining the teachings of Sato and Masson with those of Schneider and Humble.

#### **CONCLUSION**

Appellant respectfully submits that the Office has failed to establish a *prima facie* case of obviousness and that the rejection of claims 1, 3-9, 11-17, 19, 20, and 27-37 is improper.

Appellant further submits that claims 1-5 are allowable and respectfully requests that the rejection of claims 1, 3-9, 11-17, 19, 20, and 27-37 by the Office be reversed by the Board.

Respectfully submitted,



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**(viii) CLAIMS APPENDIX**

1. A method of operating a retail terminal, comprising the steps of:

generating a first voice instruction in a first voice type which instructs a user in regard to operation of said retail terminal by the retail terminal;

determining if said user performs a first activity with said retail terminal which is indicative of said user responding to said first voice instruction and generating a proper-response control signal in response thereto by the retail terminal;

generating a second voice instruction in a second voice type different from the first voice type which instructs said user in regard to operation of said retail terminal if a predetermined amount of time lapses subsequent to generation of said first voice instruction, but prior to generation of said proper-response control signal by the retail terminal;

determining if said user performs a second activity with said retail terminal which is indicative of said user disregarding said first voice instruction and generating an improper-response control signal in response thereto by the retail terminal; and

activating a light for summoning help following generation of said improper-response control signal by the retail terminal.

3. The method of claim 1, further comprising the steps of:

updating an electronic log value in response to generation of said improper-response control signal by the retail terminal; and

comparing said electronic log value to a log threshold and generating a personnel-needed control signal if said electronic log value has a predetermined relationship with said log threshold by the retail terminal.

4. The method of claim 1, wherein:

said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first volume level by the retail terminal,

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second volume level by the retail terminal, and

said second volume level is greater than said first volume level.

5. The method of claim 1, wherein:

said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice inflection level by the retail terminal,

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice inflection level by the retail terminal, and

said first voice inflection level is different than said second voice inflection level.

6. The method of claim 1, wherein:

said first voice type is configured by the retail terminal to resemble a human female voice, and

said second voice type is configured by the retail terminal to resemble a human male voice.

7. The method of claim 1, wherein:

said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice pitch level by the retail terminal,

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice pitch level by the retail terminal, and

said first voice pitch level is different than said second voice pitch level.

8. The method of claim 1, wherein:

said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice tone level by the retail terminal,

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice tone level by the retail terminal, and

said first voice tone level is different than said second voice tone level.

9. A retail terminal, comprising:

a light;

a voice generating device;

a processing unit electrically coupled to said voice generating device and said light; and

a memory device electrically coupled to said processing unit, wherein said memory device has stored therein a plurality of instructions which, when executed by said processing unit, causes said processing unit to:

- (a) operate said voice generating device so as to generate a first voice instruction in a first voice type which instructs a user in regard to operation of said retail terminal,

- (b) determine if said user performs a first activity with said retail terminal which is indicative of said user responding to said first voice instruction and generate a proper-response control signal in response thereto,

- (c) operate said voice generating device so as to generate a second voice instruction in a second voice type different from the first voice type which instructs said user in regard to operation of said retail terminal if a predetermined amount of time lapses subsequent to generation of said first voice instruction, but prior to generation of said proper-response control signal,

- (d) determine if said user performs a second activity with said retail terminal which is indicative of said user disregarding said first voice instruction and generate an improper-response control signal in response thereto, and

- (e) activate the light for summoning help following said improper-response control signal.

11. The retail terminal of claim 9, wherein said plurality of instructions, when executed by said processing unit, further causes said processing unit to:

- (a) update an electronic log value in response to generation of said improper-response control signal, and

- (b) compare said electronic log value to a log threshold and generate a personnel-needed control signal if

said electronic log value has a predetermined relationship with said log threshold.

12. The retail terminal of claim 9, wherein said plurality of instructions, when executed by said processing unit, further causes said processing unit to:

(a) operate said voice generating device so as to generate said first voice instruction at a first volume level, and

(b) operate said voice generating device so as to generate said second voice instruction at a second volume level, wherein said second volume level is greater than said first volume level.

13. The retail terminal of claim 9, wherein said plurality of instructions, when executed by said processing unit, further causes said processing unit to:

(a) operate said voice generating device so as to generate said first voice instruction at a first voice inflection level, and

(b) operate said voice generating device so as to generate said second voice instruction at a second voice inflection level, wherein said first voice inflection level is different than said second voice inflection level.

14. The retail terminal of claim 9, wherein:

said first voice type is configured to resemble a human female voice, and

said second voice type is configured to resemble a human male voice.

15. The retail terminal of claim 9, wherein said plurality of instructions, when executed by said processing unit, further causes said processing unit to:

(a) operate said voice generating device so as to generate said first voice instruction at a first voice pitch level, and

(b) operate said voice instruction device so as to generate said second voice instruction at a second voice pitch level, wherein said first voice pitch level is different than said second voice pitch level.

16. The retail terminal of claim 9, wherein said plurality of instructions, when executed by said processing unit, further causes said processing unit to:

(a) operate said voice generating device so as to generate said first voice instruction at a first voice tone level, and

(b) operate said voice generating device so as to generate said second voice instruction at a second voice tone level, wherein said first voice tone level is different than said second voice tone level.

17. A method of operating a retail terminal, comprising the steps of:

generating a first voice instruction at a first voice inflection level so as to instruct a user in regard to operation of said retail terminal by the retail terminal;

determining if said user performs a first activity with said retail terminal which is indicative of said user responding to said first voice instruction and generating a proper-response control signal in response thereto by the retail terminal;



generating a second voice instruction at a second voice inflection level different from the first voice inflection level so as to instruct said user in regard to operation of said retail terminal if a predetermined amount of time lapses subsequent to generation of said first voice instruction, but prior to generation of said proper-response control signal, wherein said first voice inflection level is different than said second voice inflection level by the retail terminal;

determining if said user performs a second activity with said retail terminal which is indicative of said user disregarding said second voice instruction and generating an improper-response control signal in response thereto by the retail terminal;

generating a third voice instruction at a third inflection level which instructs said user in regard to operation of said retail terminal in response to generation of said improper-response control signal by the retail terminal;

determining if said user performs a third activity with said retail terminal which is indicative of said user disregarding said third voice instruction and generating another improper-response control signal in response thereto by the retail terminal; and

activating a light for summoning help following generation of said other improper-response control signal by the retail terminal.

19. The method of claim 17, further comprising the steps of:

updating an electronic log value in response to generation of said improper-response control signal by the retail terminal; and

comparing said electronic log value to a log threshold and generating a personnel-needed control signal if said electronic log value has a predetermined relationship with said log threshold by the retail terminal.

20. The method of claim 17, wherein:

said step of generating said first voice instruction at said first voice inflection level includes the step of generating said first voice instruction at a first volume level by the retail terminal,

said step of generating said second voice instruction at said second voice inflection level includes the step of generating said second voice instruction at a second volume level by the retail terminal, and

said second volume level is greater than said first volume level.

27. A method for a self-service retail terminal, comprising the steps of:

generating a first voice instruction in a first voice type which instructs a self-service user in regard to operation of said self-service retail terminal by the retail terminal;

determining if said self-service user performs a first activity with said retail terminal which is indicative of said self-service user responding to said first voice instruction and generating a proper-response control signal in response thereto by the retail terminal;

if a predetermined amount of time lapses subsequent to generation of said first voice instruction, but prior to generation of said proper-response control signal, generating a second voice instruction in a second voice type different from the first voice type in order to convey a

desired impression on the self-service user that the self-service user has improperly used the self-service terminal, and to instruct said self-service user in regard to the proper operation of said self-service retail terminal by the retail terminal;

determining if said user performs a second activity with said retail terminal which is indicative of said user disregarding said second voice instruction and generating another improper-response control signal in response thereto by the retail terminal; and

activating a light for summoning help following generation of said other improper-response control signal by the retail terminal.

28. The method of claim 27, further comprising the steps of:

generating a third voice instruction in a third voice type different than the first and second voice types in order to convey another desired impression on the self-service user that the self-service user has improperly used the self-service terminal, and to instruct said self-service user in regard to the proper operation of said self-service retail terminal in response to generation of said improper-response control signal by the retail terminal;

determining if said user performs a third activity with said retail terminal which is indicative of said user disregarding said third voice instruction and generating another improper-response control signal in response thereto by the retail terminal; and

activating a light for summoning help following generation of said other improper-response control signal by the retail terminal.

29. The method of claim 27, further comprising the steps of:

updating an electronic log value in response to generation of said improper-response control signal by the retail terminal; and

comparing said electronic log value to a log threshold and generating a personnel-needed control signal if said electronic log value has a predetermined relationship with said log threshold by the retail terminal.

30. The method of claim 27, wherein:

said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first volume level by the retail terminal,

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second volume level by the retail terminal, and

said second volume level is greater than said first volume level.

31. The method of claim 27, wherein:

said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice inflection level by the retail terminal,

said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice inflection level by the retail terminal, and

said first voice inflection level is different than said second voice inflection level.

32. The method of claim 27, wherein:  
said first voice type is configured by the retail terminal to resemble a human female voice, and  
said second voice type is configured by the retail terminal to resemble a human male voice.

33. The method of claim 27, wherein:  
said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice pitch level by the retail terminal,  
said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice pitch level by the retail terminal, and  
said first voice pitch level is different than said second voice pitch level.

34. The method of claim 27, wherein:  
said step of generating said first voice instruction in said first voice type includes the step of generating said first voice instruction at a first voice tone level by the retail terminal,  
said step of generating said second voice instruction in said second voice type includes the step of generating said second voice instruction at a second voice tone level by the retail terminal, and  
said first voice tone level is different than said second voice tone level.

35. A method for a self-service retail terminal, comprising the steps of:

generating a first voice instruction in a first voice type instructing a self-service customer to perform a task during a transaction by said retail terminal;

determining if said self-service customer performs the task by said retail terminal;

if said self-service customer fails to perform the task, generating a second voice instruction in a second voice type by said retail terminal, wherein the second voice type is different than the first voice type and conveys an impression of seriousness to the self-service customer;

determining if said user performs the task following the second voice instruction by the retail terminal; and

if said self-service customer fails to perform the task, activating a light for summoning help by the retail terminal.

36. A method for a self-service retail terminal, comprising the steps of:

generating a first voice instruction in a first voice type instructing a self-service customer to perform a task during a transaction by said retail terminal;

determining if said self-service customer performs the task by said retail terminal; and

if said self-service customer fails to perform the task before a predetermined amount of time lapses subsequent to generation of said first voice instruction, generating a second voice instruction in a second voice type by said retail terminal, wherein the second voice type is different than the first voice type and conveys an impression of seriousness to the self-service customer;

determining if said user performs the task following the second voice instruction by the retail terminal; and

if said self-service customer fails to perform the task before the predetermined amount of time lapses subsequent to generation of said second voice instruction, activating a light for summoning help by the retail terminal.

37. A method for a self-service retail terminal, comprising the steps of:

generating a first voice instruction in a first voice type instructing a self-service customer to perform a first task during a transaction by said retail terminal;

determining if said self-service customer performs a second task different than the first task which is indicative of said self-service customer disregarding the first voice instruction by said retail terminal; and

if said self-service customer performs the second task, generating a second voice instruction in a second voice type by said retail terminal, wherein the second voice type is different than the first voice type and conveys an impression to the self-service customer that the self-service customer is illicitly operating the terminal;

determining if said user performs the first task following the second voice instruction by the retail terminal; and

if said self-service customer fails to perform the first task, activating a light for summoning help by the retail terminal.

**(ix) EVIDENCE APPENDIX**

No evidence pursuant to §§1.130, 1.131, or 1.132 or any other evidence has been entered by the Office or relied upon by Appellants.



**(x) RELATED PROCEEDINGS APPENDIX**

There are no related decisions rendered by a court or the Board or copies of such decisions.